Committee on Resources

Testimony

Subcommittee on Water and Power

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DEPARTMENT OF THE ARMY

OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

COMPLETE STATEMENT

OF

DR. JOHN H. ZIRSCHKY

ACTING ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

BEFORE THE

WATER AND POWER SUBCOMMITTEE

OF THE

COMMITTEE ON RESOURCES

UNITED STATES HOUSE OF REPRESENTATIVES

SALTON SEA

STABILIZATION AND

WATER QUALITY IMPROVEMENT

PALM DESERT, CALIFORNIA

OCTOBER 3, 1997

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

INTRODUCTION

I am John Zirschky, Acting Assistant Secretary of the Army for Civil Works. Thank you for inviting me to testify on the U.S. Army Corps of Engineers (Corps) involvement in the evaluation of the causes and proposed solutions for addressing the water quality and lake level stabilization issues facing the Salton Sea. My statement will consist of brief descriptions of the Corps environmental expertise in the civil works

arena; our project evaluation and management strengths; and the past and current involvement of the Corps in Imperial County, particularly in the Salton Sea basin, California.

The Corps has a long history in water resources management, including environmental and ecosystem protection and restoration. The Corps role as this Nation's first environmental protection agency dates back to the "Refuse Act of 1899." The Act states that:

"It shall not be lawful to throw ... any refuse matter of any kind or description whatever other than that flowing from the streets and sewers ... into any navigable water of the United States, or into any tributary of a any navigable water ..."

The Army was put in charge of enforcing this statute. We kept the garbage out of the rivers. Even earlier than that, in 1883, the Corps was entrusted with the sensitive ecosystem of Yellowstone National Park, which had been established 11 years earlier.

Today, the Corps has increased the priority of its environmental mission and gained widespread expertise and experience in all phases of environmental planning and ecosystem restoration.

CORPS ROLE IN ENVIRONMENTAL PROBLEM SOLVING

For more than two centuries, the Corps of Engineers has been committed to providing comprehensive engineering, management and technical support to the Nation. It is the Corps ecosystem restoration activities and problem-solving approach that I will highlight today.

The Corps interdisciplinary planning and engineering staff combines the resources necessary to identify problems and to develop, evaluate, and implement solutions to these problems. The well trained staff is accustomed to analyzing difficult problems and developing implementable solutions, and understands the importance of testing these solutions under the light of public scrutiny. In addition to the many planners, engineers, economists, biologists, and social scientists at Corps district offices, the Corps maintains very specialized technical expertise at several support facilities or laboratories located throughout the United States that can be mobilized to assist on an as needed basis. The Waterways Experiment Station in Vicksburg, Mississippi and the Hydrologic Engineering Center in Davis, California are world-renowned

centers of expertise. It is the unique problem solving capability of the Corps that sets it apart and makes it a leader in the environmental restoration area.

The Corps is a leader in ecosystem restoration. We have broad experience on a range of related technical and legal issues, such as protection of private property rights and public involvement, as well as extraordinary experience in resolving multiple stakeholder issues. Our experience has increased through such projects as the following:

- Restoring the south Florida ecosystem including the Florida Everglades;
- Helping ensure the future health of Lake Tahoe;
- Planning and executing the highly successful Upper Mississippi River Environmental Management Program;
- Working sensitive hypoxia and other issues on the Gulf Coast;

- Louisiana Coastal Wetlands Conservation and Restoration Program;
- the "Project Modifications for the Improvement of the Environment" program, with such projects as Yolo Basin Wetlands in California, Sammamish River Restoration in Washington, Salt Bayou, Texas, and Anacostia River and Tributaries, Maryland;
- Papua New Guinea mine operation impact consultation; and
- the Land Management System research program.

Further information on these projects and the Corps capabilities is available to the Subcommittee on request.

CORPS EXPERIENCE IN IMPERIAL COUNTY

I will turn now to a discussion of some of the Corps experience in Imperial County, California. The Corps earliest investigations in Imperial County focused on flood damage reduction. A 1943 investigation recommended construction of dikes and a dam to provide flood protection for the irrigation canals on the west side of the Imperial Valley. A 1976 flood plain report included approximate delineations of 100-year and 500-year flood events as well as water profiles for the 10-, 50-, and 100-year events. Following the Imperial County flood of 1976, which caused damages in the San Bernardino and Riverside areas, the Corps prepared a report describing the flood and summarizing its damages. Temporary emergency work was performed at Bombay Beach, consisting of strengthening a non-Federal dike threatened by the rise in the Salton Sea water level. A reconnaissance level study in 1977, conducted at the request of the Imperial County Board of Supervisors, investigated flood control in the town of Ocotillo.

In 1989, a broader study was performed to develop and evaluate potential solutions to flooding and related problems on Imperial County and San Diego County tributaries of the Salton Sea. Investigations included flooding threats from runoff from the Chocolate Mountains to the east, from several mountain ranges to the west, and from overflow from the New and Alamo Rivers. Flood damages were identified as destruction of canal embankments, clogging of

canals with sediment, inundation of agricultural fields, and destruction of precise grading of agricultural fields by deposition of sediment.

Under the authorization of the Flood Control Act of 1941 (Public Law 77-228) and with funds appropriated in FY's 1996 and 1997, a Reconnaissance Report on the Imperial County Watershed Study was completed by the Los Angeles District of the Corps in January 1997. Through evaluation of the baseline conditions and identification of key problems, the study approach was refined to focus on ecosystem restoration, with emphasis on the New River and Alamo River. In partnership with the Imperial County and Imperial Irrigation District (IID), the Los Angeles District is proceeding with a feasibility phase study called the Imperial County Ecosystem Restoration Study.

Imperial County and the IID have maintained support for a cost-shared feasibility study for the development of an ecosystem restoration plan for the New River and Alamo River. Negotiations of the Feasibility Cost Sharing Agreement (FCSA) between the Corps and the potential sponsors for the Imperial County Ecosystem Restoration Study are in the final stage. Upon completion of the FCSA, which includes the Final Project Study Plan, by the Los Angeles District, it will be submitted through the Corps South Pacific

Division to Corps Headquarters for review and approval.

The focus of the feasibility study will be to formulate and develop an ecosystem restoration plan for both the New River and Alamo River, which will concentrate on wetland and/or riparian habitat restoration. The Reconnaissance Report identified eight potential restoration sites (four on each river) for further consideration. The recommended plan for the Feasibility Study will include the design of at least one restoration area on each river. The development of this plan will require evaluation of the following water resource issues:

1) hydrology and hydraulics; 2) sediment transport; and 3) ecosystem restoration opportunities. As you are aware, water quality within the New River, Alamo River and Salton Sea Ecosystem continues to be of great concern to Federal and State agencies and environmental groups. Approximately 95% of the water supply needed to sustain the Salton Sea comes from the New River and Alamo River, which serve as collectors of agricultural, industrial and domestic runoff water. Restoration of ecosystem values along these rivers which have been degraded by adverse water quality impacts may be accomplished by wetland and riparian habitat restoration measures. These restoration measures could contribute to the improvement of the water quality in the New and Alamo Rivers.

The Corps feasibility study will implement a coordinated stakeholders awareness program for the development of ecosystem restoration opportunities. Some of the key issues consist of 1) existing short-term and long-term impacts to water quality and the ecological resources; 2) increased surface elevations of the Salton Sea due to inadequate flood control facilities within Imperial County; and 3) the lack of data on sediment yield and transport for both the New River and Alamo River, which would promote understanding of the discharge of agricultural drainage runoff versus river degradation. A technical understanding of these issues and their roles in this sensitive ecosystem is required to better predict future environmental conditions. Improving the environmental and water resources of the New River and Alamo River will be a major step towards restoring the Imperial County ecosystem.

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